Answer 1:

Bibliographic Information

Chemotherapy of subcutaneous and intracranial human medulloblastoma xenografts in athymic nude mice. Friedman, Henry S.; Schold, S. Clifford, Jr.; Bigner, Darell D. Med. Cent., Duke Univ., Durham, NC, USA. Cancer Research (1986), 46(1), 224-8. CODEN: CNREA8 ISSN: 0008-5472. Journal written in English. CAN 104:61637 AN 1986:61637 CAPLUS (Copyright (C) 2008 ACS on SciFinder (R))

Abstract

The continuous human medulloblastoma cell line TE-671 was grown as s.c. and intracranial xenografts in athymic nude mice; tumor-bearing animals were treated with chemotherapeutic agents at the 10% LD. The xenografts were sensitive to melphalan [148-82-3], 1-(2-chloroethyl)-3-(2,6-dioxo-1-piperidyl)-1-nitrosourea [84930-24-5], and 5-azacytidine [320-67-2]. No consistent response could be demonstrated to 9-β-D-arabinofuranosyl-2-fluoroadenine 5'-monophosphate [75607-67-9], and no response to methylglyoxal bis(guanyl hydrazone) [459-86-9], N-trifluoroacetyladriamycin 14-valerate [56124-62-0], or to 1-β-D-arabinofuranosylcytosine [147-94-4] was obsd. Melphalan produced an increase in the median survival of mice bearing intracranial xenografts, whereas no response was seen to 1-(2-chloroethyl)-3-(2,6-dioxo-1-piperidyl)-1-nitrosourea or 5-azacytidine. This model will allow anal. of the chemotherapeutic profile of human medulloblastoma, and provides a means to differentiate cellular sensitivity and resistance from drug access to the intracranial site.

Answer 2:

Bibliographic Information

Evaluation of the response of a panel of human melanoma tissue-cultured cell lines xenografted in nude mice to four anticancer drugs of known clinical activity. Bellet, Robert E.; Danna, Victoria; Mastrangelo, Michael J.; Eaton, Gordon J.; Berd, David. Fox Chase Cancer Cent., Philadelphia, PA, USA. Proceedings of the International Workshop on Nude Mice (1982), Volume Date 1979, 3rd(Vol. 2), 649-56. CODEN: PIWMDW ISSN: 0171-1784. Journal written in English. CAN 98:100654 AN 1983:100654 CAPLUS (Copyright (C) 2008 ACS on SciFinder (R))

Abstract

An evaluation of the predictability of a nude mouse-human melanoma panel as a secondary screen for cancer chemotherapeutic agents was undertaken. A total of 9 established human melanoma tissue-cultured cell lines heterografted in outbred Swiss nude mice was exposed to each of 4 single chemotherapeutic agents of known clin. activity against human melanoma (DTIC, BCNU = active; adriamycin, 5-azacytidine = inactive). For every cell line assay, each of 30 nude mice received a s.c. inoculation of 4 × 106 viable tumor cells. Upon tumifaction in all animals, 6 control mice received a single (i.p.) injection of sterile saline; simultaneously, 6 mice for each of the 4 test drugs received a single i.p. injection of only that drug administered at the predetd. LD10. Tumor sizes were measured weekly; each expt. was terminated 28 days post-treatment. At each measurement time point, control tumor vols. were compared with treated tumor vols. utilizing Student's t test. Statistically significant differences in tumor vol. in favor of drug-treated mice indicated chemotherapeutic response. Of the 9 cell lines exposed to the 4 chemotherapeutic agents, 4 lines were sensitive to DTIC; 3 were sensitive to BCNU; none of the lines was sensitive to adriamycin or 5-azacytidine. Thus, the nude mouse-human melanoma system may be sufficiently predictive to allow for the screening of chemotherapeutic agents of unknown clin. activity.